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## Missouri Department of Natural Resources

#### PUBLIC NOTICE

#### APPLICATION FOR MISSOURI STATE OPERATING PERMIT

DATE: September 8, 2006

In accordance with the state Clean Water Law, Chapter 644, RSMo, Clean Water Commission regulation 10 CSR 20-6.010, and the federal Clean Water Act, the applicants listed herein have applied for authorization to either discharge to waters of the state or to operate a no-discharge wastewater treatment facility. The proposed permits for these operations are consistent with applicable water quality standards, effluent standards and/or treatment requirements or suitable timetables to meet these requirements (see 10 CSR 20-7.015 and 7.031). All permits will be issued for a period of five years, unless noted otherwise in the Public Notice for that discharge.

On the basis of preliminary staff review and the application of applicable standards and regulations, the Missouri Department of Natural Resources (MDNR), as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions. The proposed determinations are tentative pending public comment.

Persons wishing to comment on the proposed effluent limitations and/or determinations are invited to submit them in writing to the Department of Natural Resources, Northeast Regional Office, 1709 Prospect Drive, Macon, MO 63552, ATTN: G. Irene Crawford, Regional Director. Please include the permit number in all comment letters.

Comments should be confined to the issues relating to the proposed action and permit(s) and the effect on water quality. The MDNR may not consider as relevant comments or objections to a permit based on issues outside the authority of the Clean Water Commission, (see <u>Curdt v. Mo. Clean Water Commission</u>, 586 S.W.2d 58 Mo. App. 1979).

All comments must be postmarked by October 8, 2006, or received in our office by 5:00 p.m. on October 11, 2006. The requirement of a signed document makes it impossible to accept email comments for consideration at this time. Comments will be considered in the formulation of all final determinations regarding the applications. If response to this notice indicates significant public interest, a public meeting or hearing may be held after due notice for the purpose of receiving public comment on the proposed permit or determination. Public hearings and/or issuance of the permit will be conducted or processed according to 10 CSR 20-6.020.

Copies of all draft permits and other information including copies of applicable regulations are available for inspection and copying at DNR's website, <a href="http://www.dnr.mo.gov/env/wpp/index.html">http://www.dnr.mo.gov/env/wpp/index.html</a>, or at the Department of Natural Resources, Northeast Regional Office, 1709 Prospect Drive, Macon, Missouri 63552.

Public Notice Date: September 8, 2006	ó
Permit Number: MO-0045811	
Northeast Regional Office	

FACILITY NAME AND ADDRESS	NAME AND ADDRESS OF OWNER
Baring South Wastewater Treatment Facility	City of Baring
Highway K	P.O. Box 2
Baring, MO 63531	Baring, MO 63531
RECEIVING STREAM & LEGAL DESCRIPTION	TYPE OF DISCHARGE
Unnamed tributary to Bridge Creek (U) Bridge Creek (00070)(C) Sec. 26, T63N, R12W, Knox County	Domestic, reissuance

#### STATE OF MISSOURI

## DEPARTMENT OF NATURAL RESOURCES

#### MISSOURI CLEAN WATER COMMISSION



# MISSOURI STATE OPERATING PERMIT

unerded, hereinafter, the Law), and the Federal Water In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Pollution Control Act (Public Law 92-500, 92<sup>nd</sup> Congress) as amended MO-004581 Permit No. of Baring Owner: Address: P.Q. Box 2, Baring, MO 63531 Continuing Authority: Same as above Address: Same as above Facility Name: Baring South Wastewater Treatment Facility Facility Address: Highway K, Baring, MO 63531 Legal Description: NW 1/4, NE 1/4, Sec. 26, T63N, R12W, Knox County Latitude/Longitude: +4014273/-9212081 Receiving Stream: Unnamed tributary to Bridge Creek (U) First Classified Stream and ID: Bridge Creek (C) (00070) USGS Basin & Sub-watershed No.: (07110002-090001)is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein: **FACILITY DESCRIPTION** Outfall #001 - POTW- SIC # 4952 Single-cell lagoon/artificial wetland field / sludge is retained in lagoon Design population equivalent is 250. Design flow is 16,000 gallons per day. Actual flow is 13,000 gallons per day. Design sludge production is 3.75 dry tons/year. This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law. Effective Date Doyle Childers, Director, Department of Natural Resources Executive Secretary, Clean Water Commission

G. Irene Crawford, Director, Northeast Regional Office

**Expiration Date** 

MO 780-0041 (10-93)

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PAGE NUMBER 2 of 5

PERMIT NUMBER MO-0045811

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect expiration of this permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

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OUTFALL NUMBER AND	UNITS	FINAL EFI	FLUENT LIMIT	MONITORING REQUIREMENTS		
EFFLUENT PARAMETER(S)		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #001					\	
Flow	MGD	*		*	once/quarter**	24hr. estimate
Biochemical Oxygen Demand <sub>5</sub> ****	mg/L		85	45	once/quarter**	grab
Total Suspended Solids****	mg/L	041	120	80	once/quarter**	grab
pH – Units	SU	***		***	once/quarter**	grab
Ammonia as N	ng/I	*		*	once/quarter**	grab
Temperature	C	*		*	once/quarter**	grab
	1					

MONITORING REPORTS SHALL BE SUBMITTED <u>QUARTERLY</u>; THE FIRST REPORT IS DUE\_\_\_\_\_DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

\_. THERE SHALL BE NO

#### **B. STANDARD CONDITIONS**

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I, & III</u> STANDARD CONDITIONS DATED October 1, 1980 and August 15, 1994, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

MO 780-0010 (8/91

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- \* Monitoring requirement only.
- \*\* Sample once per quarter in the months of March, June, September, and December.
- \*\*\* pH is measured in pH units and is not to be averaged. The pH is to be maintained at or above 6.0 pH units.
- \*\*\*\* This facility is required to meet a removal efficiency of 65% or more.

#### C. SPECIAL CONDITIONS

- 1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
  - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
    - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
    - (2) controls any pollutant not limited in the permit.
  - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
  - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

- 2. All outfalls must be clearly marked in the field
- 3. Permittee will cease discharge by connection to area-wide wastewater treatment system within 90 days of notice of its availability.
- 4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
  - (1) One hundred micrograms per liter (100 µg/L);
  - (2) Two hundred micrograms per liter (200  $\mu$ g/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500  $\mu$ g/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
  - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
  - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
- 5. Report as no-discharge when a discharge does not occur during the report period.

#### 6. Water Quality Standards

- (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
- (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
  - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
  - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses:
  - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
  - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
  - (5) There shall be no significant human health hazard from incidental contact with the water;
  - (6) There shall be no acute toxicity to livestock or wildlife watering;
  - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
  - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

#### C. SPECIAL CONDITIONS (continued)

- 7. Sludge and Biosolids Use For Domestic Wastewater Treatment Facilities
  - (a) Permittee shall comply with the pollutant limitations, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions.
  - (b) If sludge is not removed by a contract hauler, Permittee is authorized to land apply biosolids that are removed from the domestic wastewater treatment lagoon during lagoon clean-out and maintenance activities. Permit Standard Conditions, Part III shall apply to the land application of biosolids. Permittee shall notify the department at least 180 days prior to the planned removal of biosolids from the lagoon. The department may require submittation a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis.

Date of Fact Sheet: July 12, 2006

Date of Public Notice: September 1, 2006

# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FACT SHEET

This Fact Sheet explains the applicable regulations, rationale for development of this permit and the public participation process.

NPDES PERMIT NUMBER: MO-0045811

FACILITY NAME: Baring South Wastewater Treatment Facility

OWNER NAME: City of Baring

LOCATION: Sec. 26, T63N, R12W Knox County:

RECEIVING STREAM: Unnamed tributary to Bridge Creek (C) (00070)

FACILITY CONTACT PERSON: Gary Mallett

FACILITY DESCRIPTION

Single-cell facultative lagoon with artificial wetland field system with a design flow of 16,000 gallons per day. The facility discharges treated wastewater into an unnamed tributary to Bridge Creek. The discharge point is designated as Outfall #001. Approximately three and three-fourth miles below the discharge point, the flow enters Bridge Creek.

EPHONE: (660) 892-4532

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollutant Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of storm water from certain point sources. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Permits in Missouri are issued by the Director of the Department of Natural Resources under an approved program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended).

10 CSR 20-7.031 Missouri Water Quality Standards, Missouri Department of Natural Resources (the Department) "defines the Clean Water Commission water quality objectives in terms of water uses to be maintained and the criteria to protect those uses." The receiving stream's beneficial water uses to be maintained are livestock and wildlife watering and protection of aquatic life, and whole body contact recreational B. To protect these beneficial uses and the water quality of the receiving stream, effluent limitations are being established under federal and state laws.

#### **EFFLUENT LIMIT DERIVATION & RATIONALE**

Permit limits have been retained from the previous permit. A Water Quality Review Sheet was developed. Monitoring requirements have been added for ammonia, temperature. Monitoring for ammonia due to the adoption of the U. S. Environmental Protection Agency's "1999 Update of Ambient Water Quality Criteria for Ammonia". Since the distance from the outfall to Bridge Creek is over 2 miles, fecal coliform was not added as a monitoring pollutant.

This permit will be issued for a period of <u>five</u> years.



Missouri Department of Natural Resource Water Protection Program NPDES Permits and Engineering Section

## Water Quality Review Sheet

Determination of Effluent Limits

#### **Facility Information** FACILITY NAME: Baring South Lagoon NPDES MO-0045811 Existing single cell lagoon to be upgraded FACTLITY TYPE/DESCRIPTION: ECOREGION: 8- DIGIT COUNTY: Knox HUC: Central Irregular Plains Osage Plains Mississippi Alluvial Plains Ozark Highlands SE 1/4, NE 1/4, Sec. LATITUDE / LONGITUDE: LEGAL 26, T63N, R12W DESCRIPTION: Water Quality History: **Outfall Characteristics** OUTFALL DESIGN FLOW TREATMENT TYPE RECEIVING WATERBODY 001 Branch of Bridge Creek 0.019 MGD Secondary treatment (U) **Receiving Waterbody Information** 7Q10(cfs CLASS \*DESIGNATED USES OTHER CHARACTERISTICS WATERBODY Branch of Bridge TJ 0 General Criteria apply Creek С 0 LWW, AQL Bridge Creek \*Cool Water Fishery (CLF), Cold Water Fishery (CDF), Irrigation (IRR), Industrial (IND), Boating & Canoeing (BTG), Drinking Water Supply (DWS), Whole Body Contact Recreation (WBC), Protection of Warmwater Aquatic Life and Human Health (AQL), Livestock & Wildlife Watering (LWW) COMMENTS:

#### MIXING CONSIDERATIONS

Mixing Zone. None allowed, discharge to unclassified stream.

Zone of Initial Dilution (Z.I.D.). None allowed, discharge is to an unclassified stream.

## **Permit Limits and Information**

	TMDL WATERSHED:		.A. STUDY UCTED: N)	N	DISINFECTION (Y OR N)	REQUIRED:	Y	DISINFECTION WAIVER: (Y, N, NA)	N	
OUTFAI	LL#									
Wet Tes	T (Y OR N): N	FREQUENCY:		A.E.	С.	Limit:				

PARAMETER	Daily Maximum	Weekly Average	MONTHLY AVERAGE MONITORING		Sample Type
				FREQUENCY	
BOD AND NFR		45	30	once/quarter	GRAB
(TSS) (MG/L)				_	
PH STANDARD	6.0 то 9.0		6.0 то 9.0	ONCE/QUARTER	GRAB
UNITS (S.U.)	S.U.		S.U.		
AMMONIA (MG/L)	MONITOR			ONCE/QUARTER	GRAB
TEMPERATURE	MONITOR			ONCE/QUARTER	GRAB
DEGRESS C					

Please report the date, time, and location for each parameter sampled along with the average daily flow (<u>actual flow</u> measured or estimated, not design flow). All the parameters should be sampled on the same day and within no more than a 2-hour period. If dissolved oxygen (DO) is to be sampled, sampling should take place at dawn. If discharge is contingent to storm events, rainfall should be measured every time there is a discharge.

# Receiving Water Monitoring Requirements-may be established later if stream impacts from this discharge occur.

Site XX. (Name)

Parameter(s)	Sampling Frequency	Sample Type	LOCATION

## **Derivation and Discussion of Limits**

In the absence of any study by the permittee regarding achieving in-stream dissolved oxygen and ammonia water quality standards, standard technology based limits for BOD, TSS and pH from 10 CSR 20-7.015 are assumed to protect the receiving stream based on the small size of the proposed discharge. "Equivalent to secondard treatment" effluent limits would not appear to adequately protect the receiving stream during low flow periods. If the permittee submits a study as required by 10CSR20-7.015, the department will revisit the issue of BOD and TSS limits. Monitoring for temperature and ammonia are included to determine whether "reasonable potential" to exceed stream standards exists after the facility is upgraded. Permit should contain a "reopener clause" to address potential water quality iissues should monitoring indicate water quality standards are being exceeded due in part to this facility.

Reviewer: Richard J. Laux Date: 4 November 2004

Unit Chief: Richard J. Laux

Monitoring and effluent limits contained within this document have been developed in accordance with EPA guidelines using the best available data and are believed to be consistent with Missouri's Water Quality Standards and Effluent Regulations. If additional water quality data or anecdotal information are available that may affect the recommended monitoring and effluent limits, please forward these data and information to the author.